

REMARKS

Following entry of the amendments presented above, claims 20-34 will be pending in the application. Claims 1-19 have been canceled. The added claims are fully supported by the specification and the claims as originally filed.

In the August 28, 2006 Office Action, claims 1-4, 7-12, 18 and 19 were rejected under 35 U.S.C. § 102 as anticipated by Gerard et al. Claims 5, 6 and 13-16 were rejected under 35 U.S.C. § 103(a) as obvious over Gerard et al. in view of Zhao et al. Claim 17 was rejected under 35 U.S.C. § 103(a) as obvious over Gerard et al. in view of Austin et al. The specific grounds for rejection, and applicants' response thereto, are set forth in detail below.

Support for amendments

Support for the added claims can be found in the claims as originally filed. Support for added claims 20 and 26-27 is found inter alia on page 9, lines 21-25 and page 11, lines 9-25 of the specification.

Rejections Under 35 U.S.C. §102

Claims 1-4, 7-12 and 18-19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gerard et al. (U.S. Patent Pub. No. 2002/0081581). The rejection of claims 1-4, 7-12 and 18-19 is moot in light of the cancellation of those claims. To the extent that the Examiner would seek to apply the rejection to the added claims, applicants respectfully traverse and provide the following comments.

It is axiomatic that, for a prior art reference to be anticipatory, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 U.S.P.Q. 2d 1566 (Fed. Cir. 1990). Gerard et al. fails to teach, suggest or disclose all the limitations of the added claims and therefore cannot anticipate those claims. More specifically, Gerard et al. fails to disclose a buffer comprising an amount of glutamate effective to reduce the inhibition of the one or more proteins having DNA polymerase activity. Accordingly, Gerard et al. fails to teach or suggest each and every element of the claimed of the added claims and thus, the rejection is improper and should be withdrawn.

Rejections Under 35 U.S.C. §103(a)

Claims 5-6 and 13-16 are rejected under 35 U.S.C. § 103(a) as obvious over Gerard et al. in view of Zhao et al. (U.S. Patent No. 6,300,073). Specifically, the Examiner asserts that it would have been obvious to combine the method of Gerard et al. with that of Zhao et al. because the skilled artisan would have been motivated to optimize the conditions of Gerard et al. with the glutamate of Zhao et al. Claim 17 is rejected under 35 U.S.C. § 103(a) as obvious over Gerard et al. in view of Austin et al. (U.S. Patent No. 5,817,461). The rejections of claims 5-6 and 13-17 are moot in light of the cancellation of those claims. To the extent that the Examiner would seek to apply the rejection to the added claims, applicants respectfully traverse and provide the following comments.

To establish *prima facie* obviousness, the Examiner must show in the prior art some suggestion or motivation to make the claimed invention, a reasonable expectation for success in doing so, and a teaching or suggestion of each claim element. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991). Applicants respectfully assert that the combination of Gerard et al. with Zhao et al. fails to establish *prima facie* obviousness of the added claims and therefore request withdrawal of the rejections.

The combination of Gerard et al. and Zhao et al. fails to teach or suggest that instantly claimed invention. In particular, neither Gerard et al., nor Zhao et al., alone or in combination, teaches or suggests that glutamate ion can be used to reduce the inhibition of DNA polymerase activity in the presence of one or more reverse transcriptases. In this respect, Gerard et al. fails completely to teach or suggest a glutamate containing buffer while Zhao et al. merely discloses K-glutamate as a convenient source for monovalent cations. In other words, Zhao et al. suggest inclusion of potassium glutamate as a source of *potassium* and not as a source of *glutamate*. There is simply no teaching or suggestion in the disclosure of either cited art reference to motivate the skilled artisan to use glutamate to reduce the reverse-transcriptase mediated inhibition of DNA polymerase activity.

Moreover, Zhao et al. not only fails to teach nor suggest that glutamate can be used to reduce the reverse-transcriptase mediated inhibition of DNA polymerase activity, but also specifies the use of **mutant** polymerases. For example, Zhao et al. states at column 2, lines 18-20: “[t]he subject enzyme compositions at least include a mutant thermostable DNA polymerase” (see also claim 1 reciting, “[a]n enzyme composition comprising: a mutant thermostable DNA

polymerase"). By contrast, the instant claims recite the use of specified DNA polymerases (e.g., Tbr, Tru, Tli, Tac, Tih, *etc.*) that are not mutant polymerases.

In sum, for the reasons set forth above, one of ordinary skill in the art would not have been motivated to combine Zhao et al. and Gerard et al.; even if the combination were to have been made it would not have resulted in the instantly claimed invention that recites use of specific DNA polymerases that are not mutant polymerases. Accordingly, withdrawal of the rejection respectfully is requested.

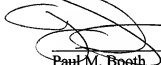
Finally, Austin is cited merely for its alleged disclosure of antifoam reagents and fails to cure the deficiencies of Gerard et al. and Zhao et al. set forth above. Accordingly, withdrawal of the rejection respectfully is requested.

CONCLUSION

In view of the foregoing amendments and remarks, applicants respectfully submit that the application is in condition for allowance. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the undersigned to expedite prosecution of the application.

The Commissioner is hereby authorized by this paper to charge any fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-3840. **This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).**

Respectfully submitted,



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Date: February 28, 2007

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